## REMARKS

The Examiner has objected to the disclosure for several informalities. Applicant has amended the specification to correct these informalities as follows: line 3 of paragraph 16 of the specification has been amended by replacing element number "26" after --the first compacting drum—with --14--. Additionally, paragraph 18 has been amended by deleting "motor" and changing "teeth 110" to --teeth 112—in lines 5 and 14, respectively. Applicant has made the appropriate corrections and respectfully request withdrawal of the objections thereto.

The Examiner has objected to the drawings, the first objection being under 37 CFR 1.83(a) for not showing every feature of the invention specified in the claims. Specifically, the Examiner points out that the "hand wheel" as set forth in claim 8 must be shown or deleted from the claim. Applicant would like to point out that in Fig. 2 of the drawings as filed the "hand wheel" is shown directly above the "first motor 28" and is called out by element "96". Applicant therefore contends that no correction is necessary and respectfully requests withdrawal of the objection.

The Examiner has also objected to Fig. 3 as it appears to be a mirror image as is shown in Fig. 2. Applicant is somewhat perplexed as to the basis for this objection as it is often common place in mechanical drafting to show objects from different perspective views so as to clarify different aspects of the design. However, in an effort to move the case to allowance applicant has provided a new Fig. 3 as a mirror image as to what was submitted at the time of filing the application. Applicant therefore contends that the appropriate action as required by the Examiner has been taken and respectfully request withdrawal of the objection of Fig. 3 of the specification.

The Examiner has rejected claims 5-8, 10, 16-18 and 20-22 under 35 U.S.C. 112, second paragraph for not particularly pointing out and distinctly claiming the subject matter which is regarded as the invention. The Examiner has rejected these claims as follows: Claim 5 lines 2-3, "said moveable ring gear" lacks clear antecedent basis.

Claim 10 lines 7-8, "said sensor to control operation of said vibrator propel motor" lacks clear antecedent basis.

Claim 16 line 4, "said moveable ring gear" lacks clear antecedent basis.

Claim 17-18 line 1, "said phase control" lacks clear antecedent basis.

Claim 20 lines 2-3, "said moveable ring gear" lacks clear antecedent basis.

Claim 21 line 2, "said through shaft" lacks clear antecedent basis.

Claim 21 lines 8-9, "said phase control device" lacks clear antecedent basis.

Applicant has amended claim 5 by changing the dependency from "claim 3" to "claim 4" thereby providing proper antecedent basis for "said moveable ring gear" in claim 5 thereby correcting the dependency of claims 6-8 as well. Claim 10 has been amended to more distinctly claim that which is regarded as the invention specifically lines 7 and 8 of claim 10 has been amended to state "a controller that uses an output of connected to and utilizing an output from said speed sensors and said sensor, to control operation...". Thus the sensor is an input to the controller for controlling the operation of the vibratory mechanism and not "a sensor for..." as was the initial interpretation of the Examiner. Claim 16 has been amended to depend from "claim 15" and not from claim 12 as originally filed. The dependency of claims 17-21 has been amended to appropriately depend from claim 16. Thus correcting any improper antecedent basis problems with these claims. Additionally, applicant has amended claim 21 by deleting "said through shaft" and replacing it with --said pinion gear--. Applicant therefore requests reconsideration and withdrawal of the rejection under 35 U.S.C. 112 of claims 5-8,10,16-18 and 20-22.

The Examiner has rejected claims 1-3,5,8,11 and 23-24 under 35 USC §102 (b) as being anticipated by Wall US Patent 4,152,943.

Applicants respectfully traverse the examiners rejection of independent claims 1,11 and 23. The Wall reference does not include a gearbox. Applicant has consulted Webster's II new riverside university dictionary as to the usual and customary definition of the term "gearbox", which reads as follows: n. an automotive transmission. To which Applicant turned to the same reference for the definition of transmission, which reads as follows: ...3. a. An automotive assembly of gears and associated parts by which power is transmitted form the engine to a drive shaft. b. A system of gears. Applicant has thoroughly reviewed the entire specification of the Wall reference and it does not teach or even suggest an assembly of gears or system of gears of any kind. The element "12" that the Examiner

refers to is an end housing and not a gearbox at all. Applicants therefore contend that the Wall reference does not anticipate all the limitations of independent claims 1,11 and 23. Applicant therefore respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C. 102(b) of independent claims 1,11 and 23. Regarding the rejection of claims 2,3,5, and 8, since these claims depend from independent claims that can not possibly be anticipated by the Wall reference these claims are believed to be allowable for at least the same reasons that apply to claims 1,11 and 23. Applicant has cancelled claim 24, thus rendering the Examiner's rejection under 35 U.S.C. 102(b) moot. Therefore Applicant respectfully requests reconsideration and withdrawal of the rejections under 35 U.S.C. 102(b) of claims 2,3,5 and 8.

The Examiner has rejected claims 1-3,5,8,11 and 23-24 under 35 USC §102 (b) as being anticipated by Goehler US Patent 4,454,780.

Applicants respectfully traverse the examiners rejection of independent claims 1,11 and 23. Again Applicant has reviewed the entire specification of the Goehler reference and it does not teach or even suggest an assembly of gears or system of gears of any kind. The element "14" that the Examiner refers to is a housing and not an assembly of gears or system of gears at all at all. Applicants therefore contend that the Goehler reference does not anticipate all the limitations of independent claims 1,11 and 23. Applicant therefore respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C. 102(b) of independent claims 1,11 and 23. Regarding the rejection of claims 2,3,5 and 8, since these claims depend from independent claims that can not possibly be anticipated by the Goehler reference these claims are believed to be allowable for at least the same reasons that apply to claims 1,11 and 23. Applicant has cancelled claim 24, thus rendering the Examiner's rejection under 35 U.S.C. 102(b) moot. Therefore Applicant respectfully requests reconsideration and withdrawal of the rejections under 35 U.S.C. 102(b) of claims 2,3,5 and 8.

The Examiner has rejected claims 6, 7 and 25 under 35 U.S.C. §103(a) over Wall US Patent 4,152,943.

Applicant respectfully traverses the Examiner's rejection under 35 U.S.C. § 103(a) and respectfully points out MPEP sets forth three basic requirements for a prima facia case of obviousness under 35 USC 103(a). MPEP § 2143 Mandates:

"...three basic criteria must be met. First, there must be some motivation, either in the referenced themselves or in knowledge generally available to one of ordinary skill in the art, to modify the references or to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all of the claimed limitations."

Referring to claims 6, 7, Applicant contends that there is no motivation in the Wall reference to connect a phase motor or a rack and a pair of hydraulic cylinders to a gearbox, since the Wall reference is void of any mention of a gearbox. Additionally, since these elements are added to the vibratory mechanism so that the amplitude can be adjusted automatically during operation of the work machine and the Wall reference must be adjusted manually by the "indexing hand wheel 46" therefore the only motivation to combine the Wall reference with any other means for indexing the phase difference of the vibratory mechanism. There may be a reasonable expectation for success, using the disclosure of the present application, and the Wall Erasmus reference. However, the Wall reference is void of a teaching of controlling the vibratory mechanism automatically with the use of a controller and the elements as set forth in claims 6 and 7. Lastly, as discussed above the Wall reference does not include all of the limitations as set forth in the chain of dependency of claims 6 and 7 with independent claim 1. Specifically, not teach or even suggest a gearbox with an assembly of gears or system of gears and attaching a phase motor or a rack and a pair of hydraulic cylinders. Applicant has cancelled claim 25, thus rendering the Examiner's rejection under 35 U.S.C. 103(a) moot. Applicants therefore respectfully request reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) of claims 6,7.

It is respectfully urged that the subject application is in condition for allowance and allowance of the application at issue is respectfully requested.

Respectfully submitted,

off A. Greene

Registration No. 45,756

Patent Agent Caterpillar Inc.

Telephone: (309) 675-1056 Facsimile: (309) 675-1236 G:/JAG/Amend/99-633.doc